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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,981	10/18/2004	Yen-Fu Chen	RSW920040131US1	5980

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EXAMINER	
DUONG, OANH L	

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/711,981	CHEN ET AL.	
	Examiner	Art Unit	
	Oanh Duong	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 October 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 November 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/21/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claim 1-3 are presented for examination.

Priority

2. No claim for priority has been made in the application.

3. The effective filing date for the subject matter defined in the pending claims in the application is 10/18/2004.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted was filed on October 21, 2004. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings Objection

5. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

6. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "network 100" or network node 100 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

7. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "100" has been used to designate both "network 100" and "network node 100" as defined in the specification in page 7 paragraph 25 line 1 and page 8 paragraph 26 line 11.

Specification Objection

8. The disclosure is objected to because of the following informalities: On pages 1 and 3, the text of paragraphs [para1], [para8], and [para 9] should be updated with current status of the cited application such as U.S. Patent Application Serial No., a filing date, U.S. Patent No., and the issued date.

9. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

10. The specification of the invention should include a header "BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S)".

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT

(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
(f) BACKGROUND OF THE INVENTION.
(1) Field of the Invention.
(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.
(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).
(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

11. Claims 1-3 are objected to because of the following informalities: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on a separate sheet or electronic page (37 CFR 1.52(b)(3)). **Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps**. See 37 CFR 1.75 and MPEP 608.01(i)-(p).

12. Regarding claim 1, it is not clear that the features "any customer" in lines 6 and 8 imply to the same or different "any customer" in line 4. If it is the same, "said any

customer" or "the any customer" should be used. If it is different, one label such as "any customer" cannot be used to designate two different customers.

13. Regarding claim 2, it is not clear that the features "a standard customer" in lines 9-10 implies to the same or different "a standard customer" in lines 11-12. If it is the same, "said standard customer" or "the standard customer" should be used. If it is different, one label such as "a standard customer" cannot be used to designate two different customers.

14. Claim 2 recites the limitations "the performance level" in line 8, and "a penalty" in line 24. There are insufficient antecedent basis for those limitations in the claim.

15. Regarding claim 2, it is not clear that the features "any customer" in lines 16 and 18 imply to the same or different "any customer" in line 14. If it is the same, "said any customer" or "the any customer" should be used. If it is different, one label such as "any customer" cannot be used to designate two different customers.

16. Regarding claim 2, it is not clear that the features "a standard customer" in lines 21-22 implies to the same or different "a standard customer" in lines 19-20. If it is the same, "said standard customer" or "the standard customer" should be used. If it is different, one label such as "a standard customer" cannot be used to designate two different customers.

17. Regarding claim 3, it is not clear that the features "any customer" in lines 6 and 8 imply to the same or different "any customer" in line 4. If it is the same, "said any customer" or "the any customer" should be used. If it is different, one label such as "any customer" cannot be used to designate two different customers.

18. Regarding claim 3, it is not clear that the features "a standard customer" in lines 11-12 implies to the same or different "a standard customer" in line 10. If it is the same, "said standard customer" or "the standard customer" should be used. If it is different, one label such as "a standard customer" cannot be used to designate two different customers.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gandhi** et al. (hereafter, Gandhi), U.S. Pub. No. **2005/0120102** A1 in view of **Sankaranarayan** et al. (hereafter, Sankaranarayan), U.S. Patent No. **6,799,208** B1.

21. Regarding claim 1, **Gandhi** teaches process for allocating a resource (i.e., method for allocating network resource, page 2 paragraph [0019]), the process comprising:

determining if the resource has been allocated to any customer that is not using the resource (i.e., *determining if there are excess tokens, which represents unused network resources allocated to a customer*, page 2 paragraph [0025]); and responsive to determining that the resource has been allocated to any customer that is not using the resource, reallocating the resource to another customer (i.e., *allocate excess tokens, which represent unused network resources, from customer A to customer B*, page 3 paragraphs [0045]-[0047]).

Gandhi does not explicitly teach reallocating a resource from a standard customer to premium customer as claimed.

Sankaranarayan teaches resource management architecture implemented in computer systems to manage resources wherein various policies are used to allocate resources (see abstract). **Sankaranarayan** teaches allocating a resource to a premium customer in a shared computing environment (i.e., *reassigning/reallocating resources from a low priority customer to higher priority customer*, col. 5 line 14-17) when a profiling tool (i.e., *resource quantifier* 106, Fig. 2) indicates the available resource cannot provide an agreed service level (i.e., *if provider does not have sufficient resources left to satisfy the configuration*, col. 14 line 60-col. 15 line 7), determining if the resource has been allocating to a standard customer (i.e., *the resource manager 102 checks all configurations 124 of all activities 122 with a lower priority than the one*

currently requesting resources to determine if any low priority activity is currently using resources, col. 15 lines 1- 18); and

responsive to determining that the resource has been allocated to a standard customer, re-allocating the resource from the standard customer to the premium customer (i.e., *the resource manager can reclaim resources from lower priority activities to satisfy the reservation request of a higher priority activity*, col. 12 lines 22-45);

whereby a service provider can minimize a penalty for breaching the agreed service level (see MPEP § 2111.04 , "the court noted (quoting Minton v. Nat 'l Ass 'n of Securities Dealers, Inc., 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed. Cir. 2003)) that a "whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited.'" Id.").

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify **Gandhi** to reallocate the resource from a standard/lower-priority customer to premium/higher-priority customer as in **Sankaranarayan.** One would be motivated to do so to allow resources to be dynamically/flexibly allocated based on which applications and/or customers have priority over others to use the resources (Sankaranarayan, col. 5 lines 11-13).

22. Regarding claim 3, this claim is the program, encoded in a computer-readable medium causing computer to execute the process of claim 1, discussed above, same rationale of rejection is applicable.

23. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gandhi** et al. (hereafter, Gandhi), U.S. Pub. No. **2005/0120102** A1 in view of **Salle**, U.S. Pub. No. **2003/0074245** A1, and further in view of **Sankaranarayan** et al. (hereafter, Sankaranarayan), U.S. Patent No. **6,799,208** B1.

24. Regarding claim 2, **Gandhi** teaches a data processing machine for allocating a resource to a customer in a shared computing environment (i.e., *devices for allocating network resources*, page 2 paragraph [0019]), the machine comprising:
a processor (*processor 863*, Fig. 8 paragraph [0076] ;
a memory (*memory 865*, Fig. 8 paragraph [0077];
determining if the resource has been allocated to any customer that is not using the resource (i.e., *determining if there are excess tokens, which represents unused network resources allocated to a customer*, page 2 paragraph [0025]); and responsive to determining that the resource has been allocated to any customer that is not using the resource, reallocating the resource to another customer (i.e., *allocate excess tokens, which represent unused network resources, from customer A to customer B*, page 3 paragraphs [0045]-[0047].

Gandhi does not explicitly teach a service level agreement stored in a memory, the service level agreement setting a threshold performance level for a resource and a penalty for failing to meet the threshold performance level; mean for causing a processor to measure the performance level of the resource; means for causing the

processor to compare the performance level with the threshold performance level; and reallocating a resource from a standard customer to premium customer as claimed.

Salle teaches method and system wherein the allocation of resources by service provider in the event of the service provider being unable to fulfill one or more of a plurality of contractual obligations is optimized (see abstract). **Salle** teaches a service level agreement (i.e., *contracts* 20,22,24, Fig. 2) stored in the memory (i.e., *contract database 10*, Fig. 1), the service level agreement setting a threshold performance level for the resource (i.e., *quantity of resource due to be supplied (denoted respectively by Q1, Q2, and Q3),* Fig. 2) and a penalty for failing to meet the threshold performance level (i.e., *the penalty to the supplier (denoted respectively by P1, P2 and P3) were the contract not to be fulfilled,* Fig. 2) [page 2 paragraphs [0021]-[0024];

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the service level agreement setting a threshold performance level for the resource and a penalty for failing to meet the threshold performance level of **Salle** in the process of allocating resources in **Gandhi**. One would be motivated to do so to allow the resources to be optimally allocated in the event of contractual conflicts required (**Salle**, page 1 paragraph [0005]).

Sankaranarayan teaches resource management architecture implemented in computer systems to manage resources wherein various policies are used to allocate resources (see abstract). **Sankaranarayan** teaches allocating a resource to a premium customer in a shared computing environment (i.e., *reassigning/reallocating resources from a low priority customer to higher priority customer*, col. 5 line 14-17); means for

causing a processor to measure the performance level of the resource (i.e., *calculating the availability of given resources can be used*, col. 8 lines 1-18)

; and

means for causing the processor to compare the measured the performance level with the threshold (i.e., *the provider compares the accumulator value to the total amount of resources it has*, col. 15 line 64-col. 16 line 22);

responsive to determining that the measured performance level does not meet the threshold performance level (i.e., *the provider adds the amount of resources required for activity A2 and finds it exceeds the total amount of resources that it has. The resource provider returns a notice that it cannot satisfy the request given its current allocation, the resource manager then evaluates whether there is any lower priority activity that currently using the requested resource*s, col. 15 line 64-col. 16 line 22),

, determining if the resource has been allocating to a standard customer (i.e., *the resource manager 102 checks all configurations 124 of all activities 122 with a lower priority than the one currently requesting resources to determine if any low priority activity is currently using resources, col. 15 lines 1- 18 and* col. 13 lines 47-67); and

responsive to determining that the resource has been allocated to a standard customer, re-allocating the resource from the standard customer to the premium customer (i.e., *the resource manager can reclaim resources from lower priority activities to satisfy the reservation request of a higher priority activity*, col. 12 lines 22-45);

whereby a service provider can minimize a penalty for breaching the agreed service level (see MPEP § 2111.04 , "the court noted (quoting Minton v. Nat 'l Ass 'n of

Securities Dealers, Inc., 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed. Cir. 2003)) that a "whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited.'" Id.").

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify **Gandhi** to measure the performance level of resources, to compare the measured performance level with the threshold performance level and to reallocate the resource from a standard/lower-priority customer to premium/higher-priority customer as in **Sankaranarayan.** One would be motivated to do so to allow resources to be dynamically/flexibly allocated based on which applications and/or customers have priority over others to use the resources (**Sankaranarayan**, col. 5 lines 11-13)

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a) Das et al. (US 2005/0172291 A1) discloses method and apparatus for utility-based dynamic resource allocation in a distributed computing system.

b) Anstey et al. (US 2005/0228878 A1) discloses a method to aggregate evaluation of at least one metric across a plurality of resources wherein if any predetermined thresholds have been violated is determined.

c) Cole et al. (US 2005/0198266 A1) discloses a system and method make quality measurements in a network to determine if a Service Level Agreement is breached.

d) Dutra et al. (US 6,917,979 B1) discloses system and method for managing compliance with Service Level Agreement.

e) Hayball et al. (US 6,959,335 B1) discloses method for provisioning a route such that a guaranteed quality of service is provided.

f) Bouilet et al. (US 6,954,739 b1) discloses method for computing the non-compliance of network service provider with contracted requirements.

g) Chang et al. (US 6,950,874 B2) discloses a method and system for management of resource leases.

h) Chaar et al. (US 6,857,020) discloses method and system for managing quality of service assured e-business service systems.

i) Boivie et al. (US 6,842,783 B1) discloses method and system wherein a service level agreement is controlled and guaranteed.

j) Yoshimura et al. (US 2003/0069972 A1) discloses a method for resource allocating.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oanh Duong whose telephone number is (571) 272-3983. The examiner can normally be reached on Monday- Friday, 9:30 AM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Oanh Duong
September 20, 2005